MONTANA AIR QUALITY PERMIT INSTRUCTIONS AND SUGGESTED FORMAT FOR PORTABLE SOURCES

Montana Department of Environmental Quality
Air Resources Management Bureau
Permitting and Compliance Division
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This application form is to be used for all Montana air quality preconstruction permits for portable sources, including initial applications, alterations, and modifications. It is not valid for stationary sources, operating permits, or Acid Rain permits required under Title IV of the Clean Air Act.

Applications for stationary source permits and operating permits can be obtained from the Department of Environmental Quality (Department) at the above address. Application for Acid Rain permits must be made on nationally standardized forms available from the U.S. Environmental Protection Agency (EPA).

With each application, the following data, specifications, plans and drawings must be submitted. All application forms must be completed as instructed. Additional narrative descriptions must be provided as indicated. Information previously submitted and currently on file with the Department may be referenced. The reference to the previously submitted information shall include the date the material was submitted and the source (permit application number, etc.). Include all other information required by any applicable requirement or necessary to determine compliance with or implement any applicable requirement of the 1990 Federal Clean Air Act, the Montana Clean Air Act (75-2-2 MCA), or Montana's Air Quality Rules.

Air quality preconstruction permit applications are complete if all required information is provided. Information beyond that requested in the air quality permit application may be required, if necessary to demonstrate compliance with applicable requirements.

Applicants are encouraged to contact the Department as soon as possible before submittal of the permit application to determine specific application requirements for their source.

Further information or clarification concerning applications can be obtained by calling or writing the Department at the address and telephone number listed above.

§ 1.0 GENERAL FACILITY INFORMATION AND SITE DESCRIPTION

Identify what type of permitting action is needed for your facility. If the facility does not currently hold an air quality permit from the State of Montana, then the permit type is a new facility. If a facility currently holds an air quality permit from the State of Montana and is making changes to the permit or adding additional equipment to the facility that will result in an increase in potential emission greater than 15 tons per year or violates an existing permit condition, the permit type is probably an alteration. If applying for a new permit or an alteration, identify whether the Affidavit of Publication of Public Notice and Permit Application Fees are attached or forthcoming.

Supply the facility's name (business license name of owner/operator as register with the Montana Secretary of State), address, and location. List the names and telephone numbers of the owner, facility manager, and permit contact. Indicate the total property area of the site and the total number of employees at the facility.

State whether or not the proposed facility will be operated in or within 10 kilometers of a PM-10 (particulate matter less than or equal to 10 microns) nonattainment area. The PM-10 nonattainment areas in the state the Department has jurisdiction over include Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte.

If applicable, identify the person(s) that the applicant has been dealing with at the Department including any air quality permit writer(s).

§ 1.1 Process flow diagram

Provide a flow diagram of the general setup of the equipment, and describe what is happening at the various stages of the process. In a flow diagram equipment is represented by boxes to illustrate the process. A simple flow diagram is listed below for an example.

§ 1.2 Project and Site Informational Request

The applicant must complete the informational request attached to the application.

§ 2.0 PROCESS EQUIPMENT LISTING

Attach a list of all existing and proposed process equipment. For each piece of process equipment identified in this section, a separate Section 4.0 must be completed.

§ 3.0 EMISSION INVENTORY

This section is optional because the Department can complete this section for the applicant. This section is based on the information that the applicant submits as part of the application.

Plant/Project-Wide Emission Inventory

A complete emission inventory should include emissions levels of all regulated air pollutants from existing and proposed process equipment. The submittal must also include emissions of those hazardous air pollutants for which an applicable requirement has been promulgated at the time of the submittal of the application, but which will become effective at a later date. Estimated emissions are based on the proposed operating schedule and the projected average process rate. Potential to emit is to be calculated on production at maximum rated capacity for 8760 hours per year on an uncontrolled basis, taking into account any federally enforceable emission limitations.

Emissions levels should be shown in pounds per hour, tons per year, and any other terms necessary to demonstrate compliance with an applicable limit. If available, state volumes, particle size distribution, and concentrations of air contaminants. Emission inventories are to be calculated or estimated using accepted engineering methods which may include, but are not limited to, use of appropriate emission factors, material balance calculations, best engineering judgement, or process knowledge. The sources of all emission estimates must be indicated (source of emission factor used that is manufacturer's data, AP-42, source tests, etc.). Include worksheet copies that clearly show how the emissions were calculated.

§ 4.0 PROCESS EQUIPMENT/PROCESS INFORMATION

A separate Process Equipment/Process Information form must be completed for each separate piece of process equipment listed in Section 2.0. This includes any existing process equipment for which this information has not been previously submitted.

§ 4.1 Process Equipment Identification

§ 4.2 Narrative Process Equipment/Process Descriptions

Provide a narrative process description for all existing and proposed relevant processes. Existing process descriptions previously submitted to the Department do not have to be supplied and need only be referenced. The reference to the previously supplied information shall include the date the material was submitted and the source (permit application number, etc.).

Process equipment/process descriptions should include sufficient information to clearly show the design and operation of all existing and proposed process equipment and any associated air pollution control equipment or procedures. Supply all data regarding the processes relevant to the determination or regulation of emissions and all data necessary to determine compliance with an applicable requirement. Descriptions should include design data, manufacturer's specifications or engineering drawings (sizes, dimensions, capacities, residence time, and configurations) of the emitting unit, any information about the production, collection, handling, or conveyance of raw materials if such information is necessary to determine or regulate emissions or is necessary to determine compliance with an applicable requirement.

Specify and describe any limitations on source operation or any work practice standards which may affect emissions. Provide specifications of raw materials being processed and fuel used, material balance calculations, and anticipated operating temperatures if such information is necessary to determine or regulate emissions or is necessary to determine compliance with an applicable requirement.

§ 4.3 Process Equipment Description

Supply process equipment identification including, make, model, type, size, serial number, and year of manufacture. Identify the emitting unit location using Universal Transverse Mercator (UTM) coordinates to the nearest 0.01 km. UTM coordinates are available on any USGS map. Supply all relevant stack information, including height (in feet), diameter (in feet), exit gas temperature (in °F), exit gas flow rate (in actual cubic feet per minute), and exit gas velocity (in feet/second). Provide process information, including type of material processed, average process rate (tons/hr, gal/hr, etc.), and maximum rated design process rate (tons/hr, gal/hr, etc.). Process equipment may include the facility's power source, for example, a portable generator.

Estimate percent annual thruput on a quarterly basis. The percentages entered for the percent annual thruput should add up to 100%.

Provide an anticipated actual operating schedule. The facility may not be limited to this operating schedule. However, if limits are necessary to protect standards, the operating schedule may assist the Department in determining what limits may be acceptable to the facility.

§ 5.0 AIR POLLUTION CONTROL EQUIPMENT INFORMATION

A separate Air Pollution Control Equipment Information form must be completed for each piece of process equipment that has any air pollution control equipment or procedures. Air pollution control equipment includes, but is not limited to, water spray bars, water trucks, baghouses, etc. Use additional sheets of paper if necessary.

§ 5.1 Process Equipment Identification

§ 5.2 Primary and Secondary Pollution Control Equipment or Procedure Description

Descriptions should include design data, manufacturer's specifications or engineering drawings (sizes, dimensions, capacities, residence time, and configurations) of the process equipment and/or air pollution control equipment and any information which may affect the production, collection, conveyance or control of air contaminants and descriptions of any emission monitoring devices. For each regulated air pollutant emitted, specify primary control equipment information and estimated control efficiency. Specify and describe any limitations on source operation or any work practice standards which may affect emissions.

§ 5.3 Proposed Operational Limitations (if any)

Describe any proposed limitations on production or hours of operation the source will agree to make enforceable to limit potential emissions.

§ 5.4 Primary and Secondary Air Pollution Control Equipment Identification

Supply sufficient information to identify any air pollution control equipment including, make, model, type, size, serial number, year of manufacture, estimated control efficiency, and the estimated cost of the air pollution control equipment.

§ 5.5 Emissions Control Analysis

A Best Available Control Technology (BACT) is required for all new or altered sources that result in an increase in emissions obtaining an air quality preconstruction permit. The BACT analysis must include a listing of all technologically feasible control options. Control costs (cost per ton of air pollutant controlled) should be calculated for each option. Options may then be eliminated for economic, energy, or environmental reasons. The control option that is selected should have controls or control costs similar to other recently permitted similar sources and should be capable of achieving appropriate emission standards.

§ 5.6 Stack Height and Dispersion Technique Analysis

If applicable, supply a stack height and dispersion technique analysis demonstrating compliance with the requirements of the Stack Heights and Dispersion Techniques rules.

§ 5.7 Ambient Air Quality Impact Analysis

§ 5.7.1 (a) Existing Air Quality Status, a narrative description of the existing air quality status (non-attainment area, etc.) and copies of any existing air monitoring data reports or dispersion modeling. Information previously submitted and currently on file with the Department may be referenced. The reference to the previously

submitted information shall include the date the material was submitted and the source (permit application number, etc.).

§ 5.7.1 (b) Applicable Rules, a listing and description of all applicable state or federal ambient air quality standards.

§ 5.7.1 (c) Ambient Air Quality Monitoring Requirements, a listing and description of all applicable state or federal ambient air quality monitoring requirements and a detailed description of any proposed ambient air monitoring.

§ 5.7.1 (d) Ambient Air Quality Dispersion Modeling, a description and results of all required ambient air quality dispersion modeling.

§ 5.7.1 (e) Compliance with Applicable Standards, a demonstration of compliance with any applicable ambient air quality standards.

§ 6.0 INSTRUCTIONS ON PUBLIC NOTICE FOR AIR QUALITY PRECONSTRUCTION PERMIT

The public notice and the accompanying instructions are attached to the application. All text within the box, including the applicant's responses, must be incorporated in the public notice.

§ 7.0 CERTIFICATION OF ACCURACY AND COMPLETENESS

Each permit application must be submitted with an **original signature** of the corporate officer, responsible official, authorized representative, or designated representative, certifying that the information contained in the application is, to the best of their knowledge, true, accurate and complete.